

IT Talk

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Message from the CIO



Why I3P?
Improved Security,
Efficiency, Integration, and
Mission Support!



Stay Connected Anywhere/ Anytime



NEACC Prepares for I3P EAST Contract



Message from the CIO

by Linda Cureton

When I took over as the CIO at NASA. I told my staff that I wanted to publish an ongoing review of some of the best things we were doing in information technology (IT). At first, they balked: "We are technologists; we should be electronic...," or "What do we have to write about?" To their credit, they found lots to write about, and plenty of people now read their words on paper (but we also use them again and again electronically). As a matter of fact, one visitor traveled from the British Government in London to talk with us as a result of our story on the IT Infrastructure Library (ITIL), which is a British invention.

IT Talk was designed to shine a light on all the good things our NASA Centers are doing in the information technology world. For the past year, we have endeavored to highlight IT accomplishments. As you can see, we have expanded to a magazine format and hope you like our new look and design. Amazingly enough, more and more people are offering story ideas. We have some wonderful stories planned for the New Year. If you have a story idea, please send it to our editor, Eldora Valentine, at eldora.valentine-1@nasa.gov.

This year will bring some pretty hefty IT challenges, including a transition to NASA's IT Infrastructure Integration Program (I3P). The I3P will transform NASA's IT service delivery from Center-based to Agency-based, resulting in IT service consistency, management, and enhanced IT security for our customers. You can read more about I3P and what it means to you in this latest issue.

Also in 2011, we will hold our second annual IT Summit, August 15-17, in San Francisco, CA. The inaugural Summit proved very successful, and next year we plan to continue our exploration of the outer reaches of information technology. Themes include social networking, green IT innovation, infrastructure, operations, and IT security and privacy. The IT Summit will help us share IT innovations across the Agency while learning from the efforts of other agencies and the private sector. It will be a critical step in strengthening our IT operations and achieving my vision to have the best IT organization in the Federal Government.

I have many hopes and dreams for our IT community this year. And in the coming months, I look forward to sharing my vision with you. **



Save the Date: NASA IT Summit

The NASA IT Summit is a forum of all the best that IT offers. Members of the IT community—NASA, other Federal agencies, industry, and academia—are gathered to exchange ideas, share best practices, and learn what is new and cutting-edge on the internal and external IT landscape.

- Topics will range from IT security, green IT, mission IT, and collaboration to developing our future workforce.
- Well-known keynote speakers will address the global subjects of innovation and the future of IT.

This year, NASA CIO Linda Cureton will host the IT Summit at the Marriott Marquis in San Francisco, CA, August 15–17. Please participate:

- If you have something to share, consider presenting at the summit.
- Volunteer to be part of the event.

More on how to register will be coming soon! **

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I3P Funding Process Kaizen Event Held

The Office of the Chief Information Officer held an 13P Funding Process Kaizen Event from December 6 through 10 to determine how all I3P contracts will be funded and how each Center will participate in future costing and reporting. A Kaizen event is a focused, intense, short-term project to improve a process.

The Kaizen group examined existing funding processes from across the Agency and Centers and collaboratively developed I3P Agency/NASA IT funding processes that will meet the needs for the new I3P contract obligations.

The goal of the event was to develop a consistent I3P contract funding model to maximize efficiencies and facilitate collaboration while working to align with new Agency IT Service Management processes.

Other objectives covered in the event included analyzing top issues/waste areas and identifying roles and responsibilities for the Resource Analysts and NASA Centers. Other areas that were discussed included identifying funding process performance measures, identifying funding process risks and mitigations, and identifying all postworkshop activities.

The event was hosted by the NASA Shared Services Center in Mississippi. For more information pertaining to this event, contact omar.j.derias@nasa.gov w

Why I3P? Improved Security, Efficiency, Integration, and **Mission Support!**

By Gary Cox, Associate CIO for Enterprise Services and Integration

In 2007, there was a convergence of circumstances that led to the development of the IT Infrastructure Integration Program, or I3P, and its subsequent approval by the Agency Strategic Management Council. First, two separate studies, one from the Office of Management and Budget and one from NASA's Program Analysis and Evaluation Office, indicated that NASA spent significantly more (per supported user) than peer organizations on IT infrastructure (networks, data centers, computer hardware, etc.). We had to find a way to become more efficient in providing IT services, which pointed toward consolidation of services at the Agency level.

Second, the Constellation Program relied on sending work packages across the NASA Centers to accomplish program requirements. A critical need was identified for the IT infrastructure to support the collaboration required under this distributed work model (10 healthy Centers). Instead of acting as separate business units,

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Centers had to be able to share program data and applications across a more robust and integrated network. Projects to upgrade network bandwidth and replace obsolete equipment, as well as collaborative tools to enable the mission, were needed.

Third, IT security at NASA was deemed a material weakness under NASA internal control processes due to various vulnerabilities and documented security incidents associated with how the IT infrastructure was provisioned, managed, and designed. It became clear that we had to become more disciplined in controlling system access, patching vulnerabilities, and monitoring/ securing network boundaries.

Fourth, several large Agency IT contracts were on the verge of expiring and in need of replacement, such as the Outsourcing Desktop Initiative for NASA (ODIN) contract. Rather than recompete contracts in kind, a fresh look was given to customer pain points, lessons learned, service requirements, technology possibilities, and Government/industry best practices in developing the new I3P procurements. In conjunction, NASA is implementing a disciplined IT service management capability that aligns with the IT Infrastructure library V.3 framework for service strategy, design, transition, operation, and continuous improvement.

> Finally, the Agency needed to implement improved identity, credential, and access management to meet Federal mandates under Homeland Security Presidential Directive 12. This required

that several critical projects

be executed at the Agency level to enable the use of smart cards for logical access and authorization to systems such as the NASA Consolidated Active Directory (NCAD) and the NASA Account Management System (NAMS). Single sign-on is now becoming more prevalent as a result of these initiatives.

In summary, I3P was developed in response to the challenges identified above. Its six goals are as follows:

- 1. Define the network perimeter and consolidate network management by establishing a policy and architecture for implementation, hardware installation, connectivity, and firewall configuration.
- 2. Establish the Agency network visibility of IT assets and consolidate Agency network monitoring and management,









The graphics above display the iPhone WebTADS mobile user interface.

Stay Connected-Anywhere, Anytime

Just over a year ago, the NASA **Enterprise Applications Competency** Center (NEACC) began piloting capabilities designed to extend the functionality of existing applications to mobile devices. Currently the NEACC App Store (https://appstore. neacc.nasa.gov) features secure mobile applications "for the iPhone and Blackberry devices popular with NASA personnel, and provides a user feedback and support mechanism. When current enhancement initiatives are completed, the App Store catalog will include applications for all of the primary device operating systems used within NASA-BlackBerry, iOS, Android, and Adobe AIR—and will continue expanding with offerings that enable workforce efficiencies and convenience.

NASA's Web-based Time and Attendance Distribution System (WebTADS) was the first NEACC application considered for mobile usage because it is an essential component of operations for civil servants across the Agency. WebTADS Mobile's on-the-go capability improves the timeliness of WebTADS submittals by providing convenience and accessibility, making it easy to complete WebTADS input and approvals even when traveling or attending meetings. WebTADS Mobile began with a pilot group of 306 users who were given the ability to access and update time and attendance using a smartphone. Evidence compiled

since the initial pilot rollout suggests that the application far exceeds the expectations of users of typical mobile apps—with many pilot users describing it as the "perfect" solution for a high-frequency, business-critical function.

Shortly after WebTADS Mobile was released, the NEACC began working on an offering for NASA People, providing users with the ability to quickly look up NASA colleagues' contact information directly from a mobile device. The mobile application also includes Google Maps views of individual locations along with points of interest (see the graphics below for a representation of the NASA People user interface for the iPhone).

A key factor in the development of these mobile applications has been the early support and involvement of a broad set of beta participants who

put each mobile application
through its paces. A threaded
feedback forum was used
to capture issues and
product ideas and provide
announcements to the pilot
community. In addition to
having a strong set of early
adopters, another key factor
to their success was the high
priority given to usability. Taking
into account the user experience,
scientific studies were conducted
to ascertain usability of everything
from installation to logon and from

functionality to speed. Even the colors used on the screen and the behaviors of individual windows were measured in terms of answering the question, will this be used effectively and efficiently by the entire audience?

The NEACC will continue to evolve its mobile application offerings to meet the needs of the user community and provide easier access to high-demand applications supported by the NEACC. For additional information and frequently asked questions regarding NEACC mobile applications, please visit our App Store (https://appstore.neacc.nasa.gov/faq), and be sure to join the NEACC Community Feedback Forum at https://feedback.neacc.nasa.gov/forums/list.page. %



NEACC Prepares for I3P EAST Contract

The NASA Enterprise Applications Competency Center (NEACC) operates and maintains a broad spectrum of NASA's Enterprise Applications, with an emphasis on fully integrating business process expertise with application and technical know-how. A small team of civil servants and approximately 300 support contractors sustain operations, implement new applications and capabilities, and provide business readiness support to the stakeholders and end users. Nine lines of business are served by over 50 applications and a multitude of integration services, all depending on the NEACC to provide continuous operations that meet or exceed established service level measures.

Contractor support for the NEACC has been managed through a cost-plus-award-fee contract vehicle for several years (Unified NASA Information Technology Services [UNITeS], PRISM), but the expiration of the current contract will mark a dramatic culture shift as the fixed-price era begins on February 1, 2011, the inception date for Enterprise

Applications Service Technologies (EAST). During the 90-day transition period, which began in early November, the NEACC team is being trained in new processes and new internal support systems while learning a new set of acronyms and adjusting to a whole new way of doing business, all the while continuing support for operations.

One of the most challenging aspects of EAST is the introduction of the Application Points concept for measuring and tracking work. The current backlog (averaging 180 breakfix service requests and approaching 1,800 change requests, plus projects in flight) is being reviewed, evaluated, and assigned application points based on historical guidelines in preparation for the EAST contract February 1 start date. On day one, the backlog information must be fully translated and feeding into the EAST Application Points Capacity Management System (APCMS), with all NEACC personnel knowledgeable and competent in the systems and processes being introduced.

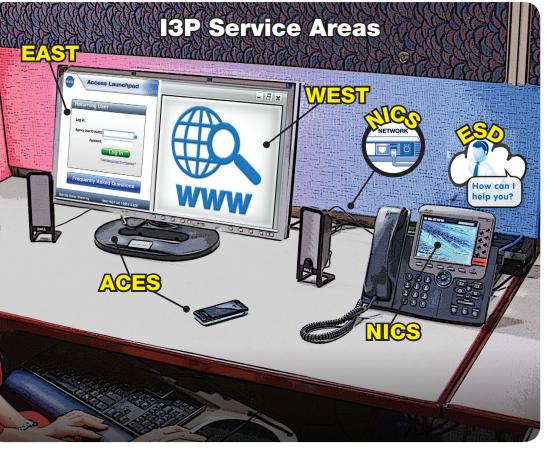
The transition period is being carefully managed by Anita Webster (NASA) and Susan Myers (EAST Program Manager). From a contract perspective, the transition focuses on staffing, business management, systems implementation and integration, phase-in deliverables, and the transition of an Agencyfocused operational IT group (Integrated Collaboration Environment Team) from another area of Marshall Space Flight Center. Change management and business readiness tasks, such as communications, organizational alignment, and stakeholder awareness, are also critical focus areas of the transition and are the responsibility of Barbara Henry (NASA), the NEACC's Business Readiness Manager, who is also serving as the EAST Communications Lead for the I3P Service Communications Team.

A successful transition will result in a seamless cutover to the new contract and very little impact to the NEACC's stakeholders and end users. Successful performance under EAST is expected to result in the following:

- Efficiency optimization
- Expanded capacity to enable innovation and IT enhancements
- Enhanced transparency and accountability
- Improved Capacity management
- Performance measures for lines of business
- Visibility to trending history is more consistent, allowing for continual refinement

Communications to the EAST stakeholders will kick off this month with briefings to Agency Business Process Leads and will be followed by several communication events with established Center points of contact. Key messages will be shared via the I3P Service Communications Team and the Office of the Chief Information Officer (OCIO) Strategic Communications Committee.

For more information, please contact Barbara Henry at barbara.s.henry@nasa.gov. ##



Business Readiness at the NEACC

How do IT organizations onboard customers when it comes to preparing for changes in their business systems and applications? In the past, when a traditional change management approach did not work, the NASA Enterprise Applications Competency Center (NEACC) did something entirely unexpected: it gathered the key complainers and put them to work to help devise a new method that would meet the needs and be repeatable and scalable for both projects and operations. The Business Readiness (BR) Approach was the result of a 6-month effort involving volunteers from multiple Centers representing various disciplines. Some participants were members of the Business and Administrative Systems Office (BASO) team at Headquarters; others were Reporting Leads or Business Process Leads at their Centers. A few were from the IT project management realm. An excruciatingly detailed review of our past change management efforts highlighted what worked, what fell short, and what was completely missing in terms of providing the tools needed for successful business readiness. Erin Misegades (JSC) facilitated workshops, teleconferences, and meetings as the team developed an approach document and supporting matrices designed to gauge impacts and guide mitigations.

The BR Approach was completed in May 2007. It was successfully implemented for projects in flight at the time, including the Integrated Asset Management Project. The volunteer network, perhaps fearing a relapse, continued to meet and advise the NEACC's Business Readiness team and to provide annual updates to keep the BR Approach meaningful and effective. Over the past three years, the approach has been amended. It now fully covers operational aspects. In the most recent annual review of the BR Approach, no updates were proposed. Gene Griffith, a founding member of the BR Network, head of Langley's Business Process Branch, and Business Process Lead for Finance, stated, "Business Readiness has been an evolutionary process over the years, where the NEACC and



Back row, from left: Carter Castle, David Bryan, Ronn Weaver, Brad Woods, James Washington, Jeff Preston; **Front row, from left:** Robert Vanderipe, Barbara Henry, Denise Scott, Sue Lesensky, Arlene Parker, Kellie White, Kim Edmondson, Elenore Thornton

the Centers worked hard to define, understand, and implement it.... You received very little feedback on what you could update/change/improve. I think the reason is very clear: there is nothing that needs to be updated/changed/improved. Business readiness is now a well-oiled machine. That is not to say we won't have our challenges. However, with the Business Readiness Network in place, I believe we can handle anything that comes our way."

The NEACC's Business Readiness Team does the following:

- Provides end-user documentation and training materials.
- Gathers information on the BR impacts of each service request.
- Provides consolidated impact reports prior to monthly and semiannual releases.
- Facilitates business readiness through recurring teleconferences and workshops.
- Manages the bReady portal (https://bReady.nasa.gov).
- Plans the annual Center Business Process Lead Summit.

With the transition to the EAST contract under way, change management and business readiness are key concerns within the NEACC. Six members of the NEACC's BR Team recently became certified in Prosci's Change Management Methodology and found that it closely aligns with and supports the BR Approach. After having focused only on business readiness for customers of the NEACC, the team is now ready to support the "people" side of the EAST transition.

To learn more about Business Readiness or to inquire about joining the BR Network, please contact Barbara Henry at barbara.s.henry@nasa.gov. #



The NEACC Integrates Real Property Into SAP

The Real Property Management (RPM) initiative went live on October 4, 2010, addressing an Agency business priority to integrate the identification, tracking, and valuation of NASA's real property portfolio with the Agency's financial system, SAP. The RPM system manages NASA's portfolio, which contains 4,856 buildings and other structures spanning 102 unique NASA sites. In total, the Agency's real property portfolio has a book value of \$8.9 billion and occupies over 45 million square feet.

Using the Agile Scrum for development process combined with Center participation, the RPM initiative came up with a comprehensive and integrated solution design that satisfied requirements and was a collaborative effort between the Office of Strategic Infrastructure (OSI), the Office of the Chief Financial Officer (OCFO), and the Office of the Chief Information Officer. Key benefits of RPM include automation of tasks, electronic storage of supporting documentation, standardized Agency organization codes, and utilization of Business Warehouse (BW) for enhanced reporting capabilities. For more information, visit https://bReady. nasa.gov/ and select RPM under the Initiatives tab. #

ACES Contract Awarded

Agency Consolidated End-user Services (ACES) is the second contract to be awarded under the Information Technology (IT) Infrastructure Integration Program (I3P). NASA CIO Linda Cureton said, "I am very proud to announce the award of the ACES contract with a maximum contract value of \$2.5 billion, to HP Enterprise Services of Herndon, Va. on December 27, 2010. HP Enterprise Services will provide desktop, printer, e-mail and other enduser services to the NASA community. I congratulate the entire ACES Source Evaluation Board for their hard work and tireless dedication, ensuring a quality product that touches all NASA users."

Under this Firm Fixed Price, Indefinite Delivery, Indefinite Quantity contract, HP Enterprise Services will provide: personal computing hardware (desktop, laptop, workstation, tablet computers, and managed virtual systems), e-mail, collaborative calendaring, instant messaging, directory services, mobile IT services (Smartphones, cell phones, pagers, and mobile computing devices), network peripherals (printers, multi-functional devices, and support infrastructure), Agency-standard software, catalog services, virtual team meeting services, IT training, and end-user systems management and operations.

The six-month contract phase-in begins in three waves, starting: January 3, March 1, and May 1, 2011 with corresponding contract start dates of July 1 for (DFRC, GSFC, KSC, and HQ), September 1 for (MSFC, NSSC/SSC, GRC, and JPL-MFD and Virtual Team Service only), and November 1, 2011 for (JSC, LaRC, and ARC). Base services such as e-mail and calendaring, instant messaging, and directory services will begin on July 1, 2011. %

Why I3P?

Continued from Page 4

integrating IT management and operations service to provide a onestop, end-to-end service delivery.

- **3.** Enable cross-Center collaboration and strengthen IT security by implementing strong authentication capabilities with the issuance of Agency credentials tied to authoritative sources of identities.
- **4.** Migrate systems to physically secure and properly managed data centers.
- **5.** Make NASA's information easier to discover and access by developing a taxonomy consistent with user-defined vocabularies and



- implementing the taxonomy in an information and data model.
- **6.** Standardize and consolidate the management of end-user devices and make collaborative tools available.

Note: I3P is composed of five IT service areas. Please see this issue for a discussion of the EAST IT service. Look for discussions of other I3P service areas in upcoming issues of IT Talk. **

National Aeronautics and Space Administration

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